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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,493	11/10/2003	Eric Hamilton	112056-0120	5124

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CESARI AND MCKENNA, LLP
88 BLACK FALCON AVENUE
BOSTON, MA 02210

EXAMINER

PARDO, THUY N

ART UNIT	PAPER NUMBER
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2168

MAIL DATE	DELIVERY MODE
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08/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/705,493

Applicant(s)

HAMILTON ET AL.

Examiner

Thuy N. Pardo

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6, 7, 12-50 and 52-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 6, 7, 12-50, 52-79 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's Amendment file on May 22, 2007 in response to Examiner's Office Action has been reviewed. Claims 6, 7 and 12-79 are pending in the application. Claims 6, 12, 15, 19, 21, 27, 35, 36, 42, 50, 58, 59, 68, 69 and 77-79 are independent claims. Claims 1-5, 8-11 and 51 are canceled and claims 6, 12, 15, 19, 21, 27, 30-36, 41, 42, 50 and 58 are canceled, and claim 59-79 are added.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I: Claims 6-7, 19-20: drawn to a system and method for a write operation to a file by accessing entries associated with a current consistency point by indexing into flags arrays using a value calculated by performing a logical AND operation on a consistency point counter and value of 1.

Group II: Claims 12-18, 27-29, 36-40, 42-49, 58, 59-77, drawn to a system and method for a write operation to a file by using a consistency point counter to label modified data as belonging to current consistency point or to the next consistency point and capturing data modified for the current consistency point in the current consistency point and not capturing data belong to the next consistency point.

Group III: Claims 35 and 41, drawn to a system and method for a write operation to a file by differentiating the information associated with the write operation, modifying a flag and modifying a shadow index associated with the information.

Group IV: Claims 21-26 and 30-34: drawn to a system and method for a write operation to a file by determining whether the buffer is dirty for a current consistency point and freeing if it is dirty for a next consistency point.

Group V: Claims 50, 52-57, 78 and 79: drawn to a system and method for a write operation to a file by determining a time for writing a current consistency point to persistent storage and time for capturing buffer data to a buffer.

The inventions are distinct, each from the other because of the following reasons:

Inventions Groups I, II, III, IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as accessing entries associated with a current consistency point by indexing into flags arrays using a value calculated by performing a logical AND operation on a consistency point counter and value of 1, and Group II has drawn to using a consistency point counter to label modified data as belonging to current consistency point or to the next consistency point and capturing data modified for the current consistency point in the current consistency point and not capturing data belong to the next consistency point, Group III has drawn to differentiating the information associated with the write operation, modifying a flag and modifying a shadow index associated with the information, Group IV has drawn to determining whether the buffer is dirty for a current consistency point and freeing if it is dirty for a next consistency point, and Group V drawn to determining a time for writing a current consistency point to persistent storage and time for capturing buffer data to a buffer . See M.P.E.P. § 806.05(d).

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II, III, IV, or V; therefore, restriction for examination purposes as indicated is proper.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 04, 2007

A handwritten signature in black ink, appearing to read 'Thuy Pardo', with a long horizontal flourish extending to the right.

THUY PARDO
PRIMARY EXAMINER